

July 1, 2004

Dale Andrews  
City of East Carbon  
101 West Geneva Drive  
East Carbon, Utah 84520

Re: Response to Concern Regarding Mining Near Grassy Trail Reservoir, West Ridge Mine, C/007/0041, Outgoing File

Dear Mr. Andrews:

This is in response to your letter of concern to Mr. Lowell Braxton, Director of the Division of Oil, Gas and Mining (the Division) regarding the West Ridge Resources mining operation located in Carbon County, Utah. As you stated in your letter, the West Ridge mine will be mining in the vicinity of the Grassy Trail Reservoir beginning in 2005. Included with this letter for your reference are three maps showing the mine's permitted boundary along with information relevant to your concerns. Map 5-4A, Mining Projections, shows the current permitted mining projections; Map 5-4B, Mining Projections (Extended Reserves), shows mining projections based on future reserve acquisitions; and Map 5-7, Subsidence Map, shows the current mine permit boundary, mining projections, and projected subsidence boundaries. These maps include an additional 46.35-acre Penta Creek Fee Lease located south of the reservoir (T14S R14E, SLBM, Section 7: SE ¼ of Lot 3 and all of Lot 4) that is currently under review by the Division as an incidental boundary change.

The mine began longwall mining within Whitmore Canyon and the Grassy Trail Reservoir watershed this year. A portion of Panel 7, which is projected to be mined in 2005, is situated within approximately 900 horizontal feet and 2,000 vertical feet from the southwest corner of the reservoir and its dam. As shown on Map 5-4B, the mine has projected that they will begin longwall mining in 2006 approximately 700 horizontal feet from the reservoir at Panel 8. However, this projection is subject to future reserve acquisitions and permitting.

The State of Utah R-645 Coal Mining Rules regulate effects due to subsidence. State and Federal laws permit mines to cause subsidence due to mining as long as they mitigate any material damage. However, they are not permitted to undermine or cause subsidence beneath reservoirs or dams. The attached subsidence map, Map 5-7, shows the maximum extent of potential subsidence based on a conservative 20° angle of draw. (The angle of draw is the angle from the longwall panel to the surface that projects the area of maximum subsidence.

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Subsidence data from the former Sunnyside mine indicates an angle of draw of 15° for the Sunnyside/West Ridge area.) Because the reservoir is located 300 to 400 feet beyond the 20° angle, the subsidence effects to the reservoir are believed to be negligible. The Division has not been made aware of the condition, stability, or engineering integrity of the Grassy Trail Reservoir Dam. We would welcome any discussion of your concerns between the City of East Carbon, Jim Wells (Division of Water Rights Dam Inspector), and the Division.

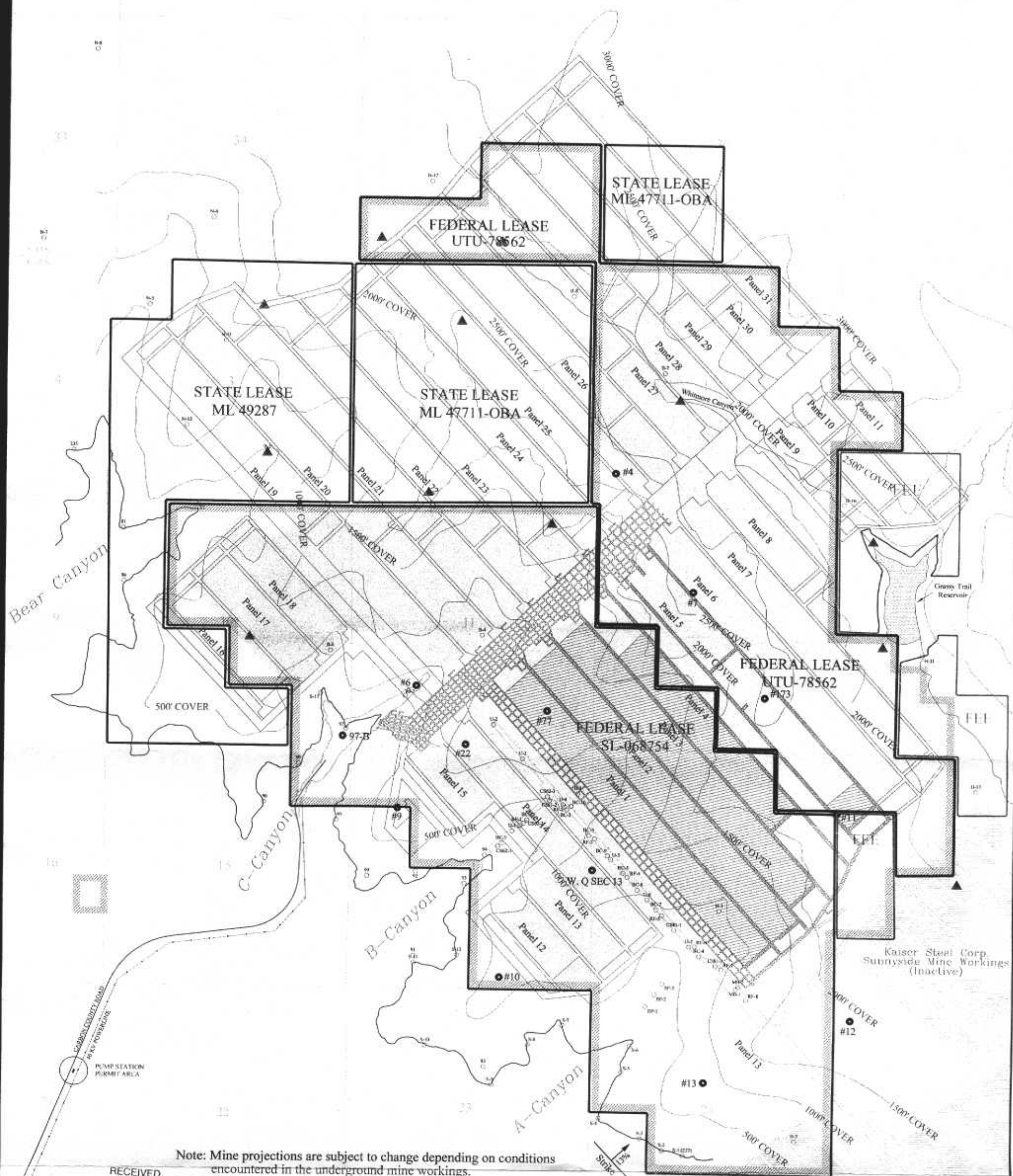
Subsidence and fracturing due to mining does have the potential to cause diminution of flow and degradation of quality to springs and streams. West Ridge has performed quarterly baseline and operational water monitoring of select springs and streams within and outside of the permit area since 1997. These include springs and streams within the Grassy Trail Reservoir watershed. In addition, groundwater monitoring wells and mine inflows are monitored quarterly for quality and quantity. The Division reviews the mine's water monitoring data quarterly and has thus far not identified any adverse impacts to water quality or quantity due to mining in the area. Should data indicate that the mine has diminished flow to either springs or streams, or caused a loss of water in the reservoir, then the mine is required to replace the quantity of water depleted from that source. Water Monitoring data are available for public access on the Division's database located at <http://ogm.utah.gov/coal/edi/wqdb.htm>.

We hope this information is helpful and answers some of your questions. We too believe that these issues are important and would welcome further discussion between our technical personnel and Mr. Gary Gray of West Ridge Resources. Please feel free to contact us with additional questions, or to arrange a meeting at (801) 538-5306, or [maryannwright@utah.gov](mailto:maryannwright@utah.gov).

Sincerely,

Mary Ann Wright  
Associate Director, Mining

an  
Enclosure  
cc: Gary Gray, West Ridge Mine  
Jim Wells, Water Rights  
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Note: Mine projections are subject to change depending on conditions encountered in the underground mine workings.

Note: Actual mine works as shown as of May 01, 2004

Note: Mine projections depicted in the fringe areas beyond the existing permit area are speculative and based on future reserve acquisitions. No mining will be conducted in these areas unless those reserves are acquired in the future and permitted according to federal, state, and local permitting requirements.

West Ridge Resources acknowledges that permission to mine within the permit boundary does not imply permission to mine beyond the permit boundary.

(Longwall panels will be reconfigured as needed to prevent unauthorized subsidence beyond the permit area if extended reserves are not acquired in the future.)

Note: Additional control points will be added as mine advances.

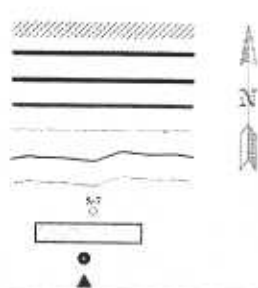
# WEST RIDGE MINE

## Map 5-7

### Subsidence Map

#### LEGEND:

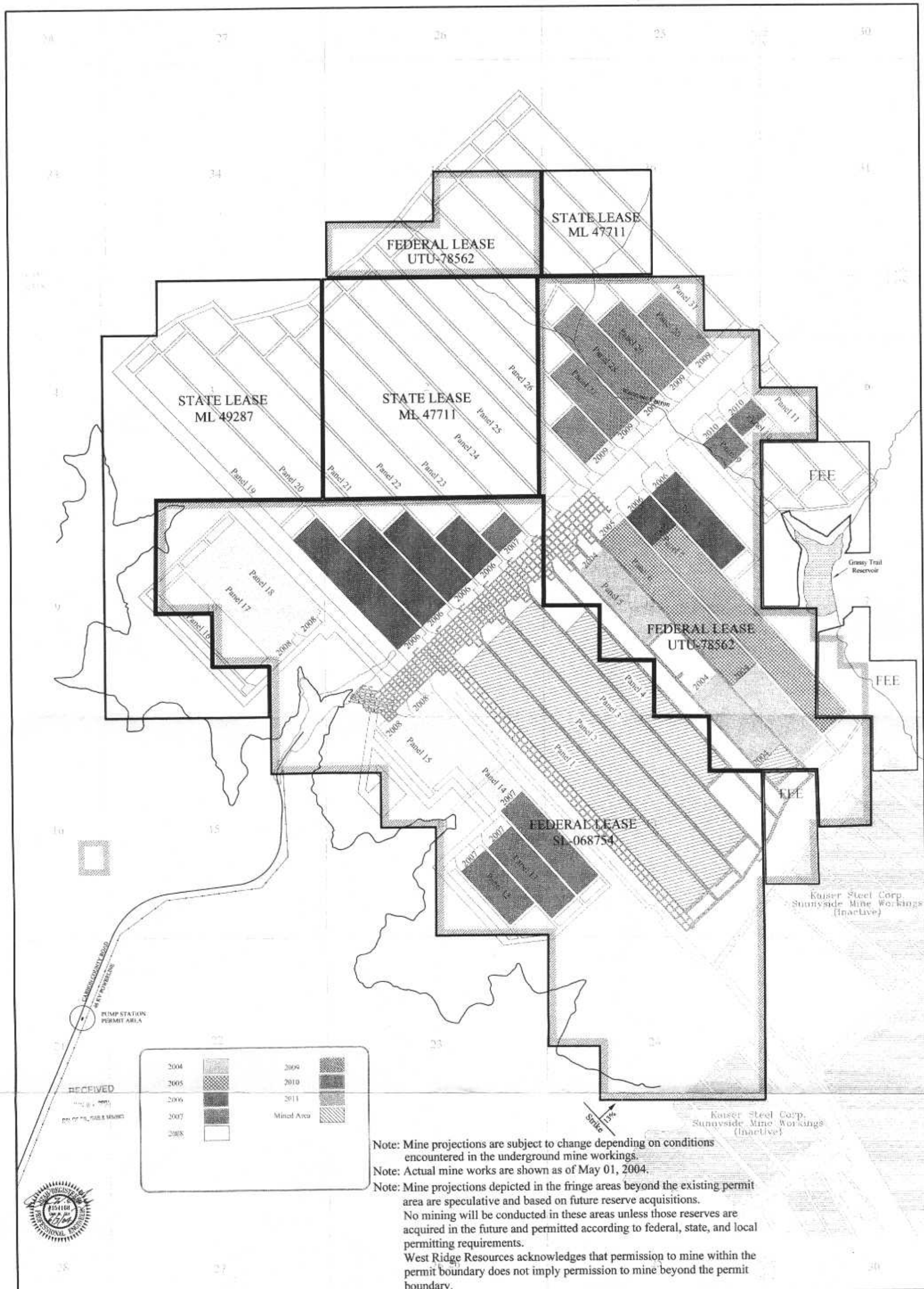
- Permit Boundary
- Federal Lease
- State Lease
- Penta Creek Fee
- Surface Facility Area
- Outcrop
- Cover
- Drill Hole/Channel Samples
- Possible Subsidence Area
- Existing Photo Grammetric Control Points
- Future Photo Grammetric Control Points



**WEST RIDGE**  
RESOURCES, INC.

SCALE: 500' 0' 1000' 2000'





# WEST RIDGE MINE Map 5-4A Mining Projections

**LEGEND:**

Permit Boundary

Federal Lease

State Lease (ML 49287)

Penta Creek Fee

Surface Facility Area

Outcrop



**WEST RIDGE**  
RESOURCES, INC.

SCALE:

500' 10' 1000' 2000'

DATE: 06-01-04

REV: 6 IBC

ACAD REF: WRTIMEA

